



220W
AF

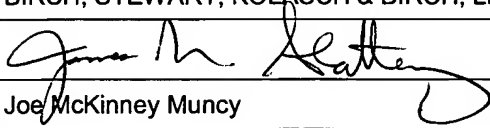
PTO/SB/21 (07-06)
Approved for use through 09/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/642,244-Conf. #8162
	Filing Date	August 18, 2003
	First Named Inventor	Sheng-Chih LAI
	Art Unit	2823
	Examiner Name	W. D. Coleman
Total Number of Pages in This Submission	Attorney Docket Number	4448-0181PUS1

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	Supplemental Reply Brief
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	BIRCH, STEWART, KOLASCH & BIRCH, LLP		
Signature	 #28380		
Printed name	Joe McKinney Muncy		
Date	September 26, 2006	Reg. No.	32,334



Docket No.: 4448-0181PUS1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Sheng-Chih LAI et al.

Application No.: 10/642,244

Confirmation No.: 8162

Filed: August 18, 2003

Art Unit: 2823

For: MASK READ ONLY MEMORY
CONTAINING DIODES AND METHOD OF
MANUFACTURING THE SAME

Examiner: W. D. Coleman

SUPPLEMENTAL REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants have now received a Supplemental Examiner's Answer dated July 28, 2006 as well as a new Examiner's Answer mailed on September 5, 2006. Applicants understand that the Examiner's Answer of September 5, 2006 incorporates the original Examiner's Answer of April 6, 2006 and the Supplemental Examiner's Answer of July 28, 2006. In addition, page 2 of the recent Examiner's Answer adds headings for the various required parts of the Appeal Brief. It also includes a minor rewording on pages 10 and 11.

Since the Examiner's Answer of September 5, 2006 includes only material from the original Examiner's Answer and the Supplemental Examiner's Answer of July 28, 2006, and that any other changes are not substantive, the present response and answer to the Supplemental

Examiner's Answer also will suffice as an Answer to the Examiner's Answer of September 5, 2006 when taken in conjunction with the previous Reply Brief.

In response to Applicants' suggestion that Johnson fails to show dielectric layers "on the diodes" the Examiner has referred to column 5, lines 15-25 and column 8, lines 45-48 to suggest a pre-existing Schottky diode that may be present. Applicants disagree with the Examiner's suggestion. First, the Examiner in both Answers on page 3 has indicated that the diodes are identified by reference numeral 12. This is seen in Figure 1 as incorporating both sections 13 and 14 and the anti-fuse layer 16 therebetween. Accordingly, a suggestion that the Schottky diode can be formed from layers 114 and 115 contradicts that the Examiner's indication of the location of the diodes.

Secondly, Applicants disagree with the Examiner's understanding of the cited portions of the reference. The Examiner has included only part of the paragraph in column 5 which begins at line 9. The beginning of that paragraph specifically states that the cell includes a series connection of diode components and an anti-fuse layer. While it lists a number of possible implementations of the diode, the sentence starts out "Once formed, the diode". This refers to the presence of the anti-fuse layer which must be removed before the diode can be formed. The fact that the formed diode can be a Schottky diode does not state that the Schottky diode is formed from the layers 114 and 115. The statement on column 8, lines 45-48 only discusses that the conductive layer 114 may be aluminum and does not mention the Schottky diode. In addition to the reference not stating that these layers may form such a diode, the Examiner is referred to the statement at column 9, lines 57-59, "These highly-doped layers prevent ohmic transitions to prevent unintended Schottky diode formation." This is in reference to the n^+

layers. Thus, this seems to indicate that not only is the Schottky diode not formed, but that the layer specifically prevents it. Without an indication that the Schottky diode is present, it is clear that the dielectric layers on the diodes cannot be met and further diodes 12 cannot meet the terms of the claim either.

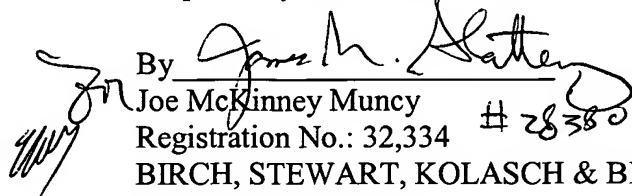
For these reasons, Applicants submit that the Examiner's Statement and the Supplemental Examiner's Answer does not overcome the Applicants' arguments as presented in the Appeal Brief and the Reply Brief. Accordingly, Applicants again request that the Examiner's rejection be reversed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse, Reg. No. 27,295, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

Dated: September 26, 2006

Respectfully submitted,

By 
Joe McKinney Muncy # 28380
Registration No.: 32,334
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant

KM/REG/af